BRAIN RESEARCH

VOL. 948 NOS. 1,2 **CONTENTS** **6 SEPTEMBER 2002**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – EMBASE/Excerpta Medica – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Elsevier BIOBASE/Current Awareness in Biological Sciences. Full text available in ScienceDirect® and Neuroscion.

Announcements

Publisher's Announcement v

Brain Research Interactive Young Investigator Awards vi

Brain Research Interactive Young Investigator Awards – November 2001 vii

Call for Papers – Gene Expression Patterns viii

Awards ix

Guide for Authors x

Themes and Topics xiv

Interactive reports (Also available on the World Wide Web at **http://www.bres-interactive.com**)

ERK regulation in chronic ethanol exposure and withdrawal
P.P. Sanna, C. Simpson, R. Lutjens, G. Koob (USA) 186

Reduced DAT- and DBH-immunostaining in the limbic system of Sardinian alcohol-preferring rats
M.A. Casu, D. Dinucci, G. Colombo, G.L. Gessa, L. Pani (Italy) 192

Research reports

Effects of LP-BM5 murine leukemia virus infection on errors and response time in a two-choice serial reaction time task in C57BL/6 mice
B. Lee, P. Tumu, I.A. Paul (USA) 1

Effects of extrinsic autonomic inputs on expression of c-Fos immunoreactivity in myenteric neurons of the guinea pig distal colon
N. Yuyama, J. Mizuno, H. Tsuzuki, S. Wada-Takahashi, O. Takahashi, K. Tamura (Japan) 8

Modification of the fenvalerate-induced nociceptive response in mice by diabetes
J. Kamei, E. Iguchi, M. Sasaki, K. Zushida, K. Morita, S.-i. Tanaka (Japan, USA) 17

Evidence for reduced accumulation of exogenous neurotrophin by aged sympathetic neurons
A.E. Kudwa, S.E. Shoemaker, K.A. Crutcher, L.G. Isaacson (USA) 24

Activation and inhibition of native neuronal alpha-bungarotoxin-sensitive nicotinic ACh receptors
V.V. Uteshev, E.M. Meyer, R.L. Papke (USA) 33

Age-related alterations in responses of the nucleus basalis magnocellularis neurons to peripheral nociceptive stimuli
Yu.-Q. Zhang, J. Mei, S.-G. Lü, Z.-Q. Zhao (China) 47

Blockade of K_{ATP} channels with glibenclamide does not alter functional activation of cerebral blood flow in the unanesthetized rat
T. Esaki, Y. Itoh, K. Shimoji, M. Cook, J. Jehle, L. Sokoloff (USA) 56

Excitatory effects of histamine on cerebellar interpositus nuclear cells of rats through H_2 receptors in vitro
B. Shen, H.-Z. Li, J.-J. Wang (China) 64

Effects of endothelin B receptor agonists on amyloid β protein (25–35)-induced neuronal cell death
T. Yagami, K. Ueda, K. Asakura, T. Kuroda, S. Hata, T. Sakaeda, Y. Kambayashi, M. Fujimoto (Japan) 72

GABAergic modulation in the substantia nigra of the striatal dopamine release and of the locomotor activity in rats exposed to helium pressure
N. Balon, B. Kriem, M. Weiss, J.-C. Rostain (France) 82

Adenovirus infection induces microglial activation: involvement of mitogen-activated protein kinase pathways
N.R. Bhat, F. Fan (USA) 93

Sex hormone binding globulin facilitates female sexual receptivity except when coupled to dihydrotestosterone
J.D. Caldwell, S. Höfle, I. Englöf (USA) 102

Ca^{2+}-activated potassium (K_{Ca}) channel inhibition decreases neuronal activity–blood flow coupling
R.J. Gerrits, E.A. Stein, A.S. Greene (USA) 108

(Contents continued inside)

0006-8993(20020906)948:1/2;1-F

BRAIN RESEARCH

VOL. 948 NOS. 1,2 **CONTENTS** **6 SEPTEMBER 2002**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – EMBASE/Excerpta Medica – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Elsevier BIOBASE/Current Awareness in Biological Sciences. Full text available in ScienceDirect® and Neuroscion.

Announcements

Publisher's Announcement v

Brain Research Interactive Young Investigator Awards vi

Brain Research Interactive Young Investigator Awards – November 2001 vii

Call for Papers – Gene Expression Patterns viii

Awards ix

Guide for Authors x

Themes and Topics xiv

Interactive reports (Also available on the World Wide Web at **http://www.bres-interactive.com**)

ERK regulation in chronic ethanol exposure and withdrawal
P.P. Sanna, C. Simpson, R. Lutjens, G. Koob (USA) 186

Reduced DAT- and DBH-immunostaining in the limbic system of Sardinian alcohol-preferring rats
M.A. Casu, D. Dinucci, G. Colombo, G.L. Gessa, L. Pani (Italy) 192

Research reports

Effects of LP-BM5 murine leukemia virus infection on errors and response time in a two-choice serial reaction time task in C57BL/6 mice
B. Lee, P. Tumu, I.A. Paul (USA) 1

Effects of extrinsic autonomic inputs on expression of c-Fos immunoreactivity in myenteric neurons of the guinea pig distal colon
N. Yuyama, J. Mizuno, H. Tsuzuki, S. Wada-Takahashi, O. Takahashi, K. Tamura (Japan) 8

Modification of the fenvalerate-induced nociceptive response in mice by diabetes
J. Kamei, E. Iguchi, M. Sasaki, K. Zushida, K. Morita, S.-i. Tanaka (Japan, USA) 17

Evidence for reduced accumulation of exogenous neurotrophin by aged sympathetic neurons
A.E. Kudwa, S.E. Shoemaker, K.A. Crutcher, L.G. Isaacson (USA) 24

Activation and inhibition of native neuronal alpha-bungarotoxin-sensitive nicotinic ACh receptors
V.V. Uteshev, E.M. Meyer, R.L. Papke (USA) 33

Age-related alterations in responses of the nucleus basalis magnocellularis neurons to peripheral nociceptive stimuli
Yu.-Q. Zhang, J. Mei, S.-G. Lü, Z.-Q. Zhao (China) 47

Blockade of K_{ATP} channels with glibenclamide does not alter functional activation of cerebral blood flow in the unanesthetized rat
T. Esaki, Y. Itoh, K. Shimoji, M. Cook, J. Jehle, L. Sokoloff (USA) 56

Excitatory effects of histamine on cerebellar interpositus nuclear cells of rats through H_2 receptors in vitro
B. Shen, H.-Z. Li, J.-J. Wang (China) 64

Effects of endothelin B receptor agonists on amyloid β protein (25–35)-induced neuronal cell death
T. Yagami, K. Ueda, K. Asakura, T. Kuroda, S. Hata, T. Sakaeda, Y. Kambayashi, M. Fujimoto (Japan) 72

GABAergic modulation in the substantia nigra of the striatal dopamine release and of the locomotor activity in rats exposed to helium pressure
N. Balon, B. Kriem, M. Weiss, J.-C. Rostain (France) 82

Adenovirus infection induces microglial activation: involvement of mitogen-activated protein kinase pathways
N.R. Bhat, F. Fan (USA) 93

Sex hormone binding globulin facilitates female sexual receptivity except when coupled to dihydrotestosterone
J.D. Caldwell, S. Höfle, I. Englöf (USA) 102

Ca^{2+}-activated potassium (K_{Ca}) channel inhibition decreases neuronal activity–blood flow coupling
R.J. Gerrits, E.A. Stein, A.S. Greene (USA) 108

(Contents continued inside)

0006-8993(20020906)948:1/2;1-F

(contents continued)

Weaker synaptic inhibition in CA1 region of ventral compared to dorsal rat hippocampal slices
C. Papatheodoropoulos, E. Asprodini, I. Nikita, C. Koutsona, G. Kostopoulos (Greece) 117

Noxious activation of spinal or vagal afferents evokes distinct patterns of fos-like immunoreactivity in the ventrolateral periaqueductal gray of unanaesthetised rats
K.A. Keay, C.I. Clement, W.M. Matar, D.J. Heslop, L.A. Henderson, R. Bandler (Australia) 122

Estrogen and progesterone treatment: effects on muscarinic M_4 receptor subtype in the rat brain
N.K. El-Bakri, A. Adem, I.A. Suliman, E. Mulugeta, E. Karlsson, J.U. Lindgren, B. Winblad, A. Islam (Sweden, United Arab Emirates) 131

Short communications

Impaired axonal transport of cortical neurons in Alzheimer's disease is associated with neuropathological changes
J. Dai, R.M. Buijs, W. Kamphorst, D.F. Swaab (The Netherlands) 138

Central α-melanocyte-stimulating hormone acts at melanocortin-4 receptor to activate sympathetic nervous system in conscious rabbits
K. Matsumura, T. Tsuchihashi, I. Abe, M. Iida (Japan) 145

Fos expression in non-catecholaminergic neurons in medullary and pontine nuclei after volume depletion induced by polyethylene glycol
K.S. Curtis, E.G. Krause, R.J. Contreras (USA) 149

Δ^9-Tetrahydrocannabinol decreases extracellular GABA and increases extracellular glutamate and dopamine levels in the rat prefrontal cortex: an in vivo microdialysis study
M. Pistis, L. Ferraro, L. Pira, G. Flore, S. Tanganelli, G.L. Gessa, P. Devoto (Italy) 155

GABAergic inhibition contributes to pulse repetition rate-dependent frequency selectivity in the inferior colliculus of the big brown bat, *Eptesicus fuscus*
P.H.-S. Jen, C.H. Wu, R.H. Luan, X. Zhou (USA) 159

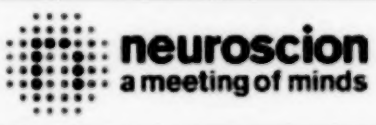
Testosterone enhances aggression of wild-type mice but not those deficient in type I 5α-reductase
C.A. Frye, M.E. Rhodes, A. Walf, J.P. Harney (USA) 165

Group I metabotropic glutamate receptor-mediated enhancement of dopamine cell burst firing in rat ventral tegmental area in vitro
F. Zheng, S.W. Johnson (USA) 171

Immunocytochemical localization of substance P receptor in hypothalamic oxytocin-containing neurons of C57 mice
H.-L. Liu, R. Cao, L. Jin, L.-W. Chen (PR China) 175

Androgen biosynthesis in the quail brain
M. Matsunaga, K. Ukena, K. Tsutsui (Japan) 180

Author Index 203



To view articles from this journal, visit Neuroscion, the comprehensive neuroscience information service on the web.

Register today at **www.neuroscion.com**

PII: S0006-8993(02)03330-9